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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,450	06/23/2003	Yukio Otake	116332	7216

25944 7590 05/12/2004

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER
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TRIEU, THAI BA

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/600,450	OTAKE, YUKIO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thai-Ba Trieu	3748	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 5 is/are rejected.
- 7) ☒ Claim(s) 2, 3 and 6-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                                             |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>06/23 &amp; 08/26/2003</u> . | 6) <input type="checkbox"/> Other: ____.                                                |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujimura (Pub. Number JP 08-200117 A).***

Fujimura discloses a control system for a turbo-charged diesel aircraft engine (1) (See Figure 2) comprising:

a throttle lever (21),

a fuel setting device (2) that sets the target amount of fuel supplied to the engine in accordance with the amount of stroke of the throttle lever (21),

a boost compensator (22) that sets the maximum limit for the amount of fuel supplied to the engine in accordance with the boost pressure of the engine and a fuel supply device (2) that supplies fuel to the engine in an amount equal to the target amount or the maximum limit whichever is smaller, wherein the system further comprises:

operating condition determining means (M13) for determining whether the current aircraft operating condition is a

condition where the rate of increase in the engine output power should be increased; and

a switching means (27) for increasing the maximum limit set by the boost compensator when it is determined by the operating condition determining means (M13) that the current operating condition is a condition where the rate of increase in the engine output power should be increased;

wherein the operating condition determining means (M13) comprises a position detecting switch that detects that the throttle lever (21) is moved to a predetermined position and determines that the current operating condition is a condition where the rate of increase in the engine output power should be increased when the throttle lever (21) is moved to the predetermined position (See Figures 1-2; Page 1, Paragraph [0002]; Page 2, Paragraph [0010]; Page 3, Paragraphs [0011], [0012] and [0013]; Page 4, Paragraphs [0014], [0015], [0017], and [0018]; Page 6, Paragraph [0032]; Page 7 , Paragraphs [0033], [0034], [0036], [0037], [0038], and [0039]; and Page 8, Paragraph [0040] of the machine translation document).

Note that the recitation of ***“the current aircraft operating condition”*** is interpreted by the examiner as the ***“current engine operating condition”***, since the

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engine by itself cannot fly, and there is no limitation reciting or proving that the engine is in flying condition.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

***Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimura (Pub. Number JP 08-200117 A), in view of Kurokawa et al. (Patent Number 4,054,112).***

Fujimura disclose the invention as recited above, and further discloses the operating condition determining means (M13) comprises a change-over switch (M15) and determines that the current operating condition is a condition where the rate of increase in the engine output power should be increased.

However, Fujimura fails to disclose the changeover switch being manually activated by the pilot of the aircraft.

Kurokawa teaches that it is conventional in the fuel injection governor art, to utilize the manual changeover switch (2) (See Figure 1).

It would has been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized the manual change-over switch, as taught by

Fujimura, since the use thereof would have improved the control accuracy of the Fujimura device.

### ***Allowable Subject Matter***

Claims **2-3 and 6-16** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

The IDS (PTO-1449) filed on June 23 and August 26, 2003 have been considered. Each initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Otake (US Patent Number 6,652,233 B2) discloses a control system for a turbocharged diesel aircraft engine.
- Vos et al. (US Patent Number 6,171,055 B1) disclose a single lever power controller for manned and unmanned aircraft.
- Dorsch (US Patent Number 4,626,170) discloses a propulsion aggregate for an aircraft.
- Itoh et al. (US Patent Number 4,864,993) disclose a boost compensator.
- Igashira et al. (US Patent Number 4,5112,307) disclose a fuel quantity control apparatus of supercharged diesel engine with safety measures.

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- Mock (US Patent Number 2,818,847) discloses an internal combustion engine.
- Uitti et al. (US Patent number 3,913,542) disclose a simplified turbocharged system for aircraft.
- Kobayashi et al. (Pub. Number JP 2000-289494 A) disclose a variable output engine and output setting method.
- Minami (Pub. Number JP 07-189747 A) discloses a fuel injection device for diesel engine.
- Fujimura (Pub. Number JP 04-081528 A) discloses fuel injection control device for Diesel supercharged engine provided with an intercooler.
- Yabe et al. (Pub. Number JP 07-109938 A) disclose engine stall preventing device for a turbocharged engine.
- Tanaka et al. (Pub. Number JP 09-088667 A) disclose a fuel injection control device for a turbocharged diesel engine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (703) 308-6450. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (703) 308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB  
May 10, 2004



Thai-Ba Trieu  
Patent Examiner  
Art Unit 3748